

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A lens driving apparatus for driving a movable body in a focus direction and a tracking direction comprising:

 a holder, to which a focus coil, a tracking coil and a lens are installed, to thereby constitute said movable body; and

 a magnetic circuit for applying magnetic fluxes to said focus coil and said tracking coil, to thereby drive said movable body in the focus direction and the tracking direction,

 said tracking coil including two sets each having upper and lower two coils arrayed in the focus direction such that the two sets are arrayed in the tracking direction,

 said magnetic circuit applying the magnetic fluxes opposite to each other along a jitter direction, with respect to the upper two coils and the lower two coils without applying the magnetic fluxes with respect to portions adjacent to the upper and lower two coils at least in an initial position thereof.

2. (Currently Amended) A lens driving apparatus for driving a movable body in a focus direction and a tracking direction comprising:

 a holder, to which a focus coil, a tracking coil and a lens are installed, to thereby constitute said movable body; and

a magnetic circuit for applying magnetic fluxes to said focus coil and said tracking coil,
to thereby drive said movable body in the focus direction and the tracking direction,

said tracking coil including two sets each having upper and lower two coils arrayed in the
focus direction such that the two sets are arrayed in the tracking direction,

said magnetic circuit applying the magnetic fluxes opposite to each other along a jitter
direction, with respect to the upper two coils and the lower two coils by a first density while
applying the magnetic fluxes with respect to portions adjacent to the upper and lower two coils
by a second density which is less than the first density at least in an initial position thereof,

said magnetic circuit having magnets, in which a magnetic polarization is performed
according to a shape corresponding to a portion except the portions adjacent to the upper and
lower two coils.

3. (Original) A lens driving apparatus according to claim 1, wherein said two sets are
arranged symmetrical about a center of gravity of said movable body.

4. (Original) A lens driving apparatus according to claim 2, wherein said two sets are
arranged symmetrical about a center of gravity of said movable body.

5. (Original) A lens driving apparatus according to claim 1, wherein said focus coil
comprises a single coil arranged between said two sets, and said magnetic circuit applies the

magnetic fluxes opposite to each other, with respect to an upper portion and a lower portion of said focus coil.

6. (Original) A lens driving apparatus according to claim 2, wherein said focus coil comprises a single coil arranged between said two sets, and said magnetic circuit applies the magnetic fluxes opposite to each other, with respect to an upper portion and a lower portion of said focus coil.

7. (Original) A lens driving apparatus according to claim 1, wherein said focus coil and said tracking coil comprise printed substrate coils, which are printed on a single plane printed substrate.

8. (Original) A lens driving apparatus according to claim 2, wherein said focus coil and said tracking coil comprise printed substrate coils, which are printed on a single plane printed substrate.

9. (New) A lens driving apparatus according to claim 1, wherein said magnetic circuit has two magnets, in which both poles are magnetized, which are respectively including the trapezoidal part composed of a bottom portion, a top portion that is narrower in width than the bottom portion, and two inclined portions, each of the top portions of said two magnets adhering to each other.

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No. 09/986,403

Attorney Docket No. Q67185

10. (New) A lens driving apparatus according to claim 2, wherein said magnetic circuit has two magnets, in which both poles are magnetized, which are respectively including the trapezoidal part composed of a bottom portion, a top portion that is narrower in width than the bottom portion, and two inclined portions, each of the top portions of said two magnets adhering to each other.